DERWENT-ACC-NO: 1994-062112
DERWENT-WEEK: 199408

TITLE: New block isocyanate used as setting agent of vinyl chloride - obtd. by
reacting hexa:methylene di:isocyanate polymer, mono:alcohol, and/or oxime,
lactam and active methylene cpds.

PATENT-ASSIGNEE: ASAHI CHEM IND CO LTD[ASAH]

PRIORITY-DATA: 1992JP-0176303 (July 3, 1992)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 06016769 A	January 25, 1994	N/A	004	C08G 018/80

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 06016769A	N/A	1992JP-0176303	July 3, 1992

INT-CL (IPC): C08G018/10; C08G018/62 ; C08G018/80 ; C08L027/06 ; C08L075/04

ABSTRACTED-PUB-NO: JP 06016769A
BASIC-ABSTRACT: Isocyanate prepd. by reacting (1) hexamethylene diisocyanate
polymer of isocyanurate bond, bullet bond, or urethane bond, contg. two or more
of free isocyanate gps., (2) 1/3 equiv. or less of monoalcohol per isocyanate
gp. of the polymer, and (3) 2/3 equiv. or less of one or more of oximes,
lactams, and active methylene cpds. is new.

Oximes are 2-butanone oxime, acetone oxime lactams are 1-epsilon-caprolactam
and monoalcohol is isopropyl alcohol or 2-ethyl hexyl alcohol. Plasticisers
are pref. n-butyl phthalate, or di-2-ethyl hexyl phthalate.

USE/ADVANTAGE - Block isocyanate is used as setting substance of vinyl chloride
sol., and has good solubility in plasticisers.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:
NEW BLOCK ISOCYANATE SET AGENT VINYL CHLORIDE OBTAIN REACT HEXA METHYLENE DI

ISOCYANATE POLYMER MONO ALCOHOL OXIME LACTAM ACTIVE METHYLENE COMPOUND

DERWENT-CLASS: A14 A25 A26

CPI-CODES: A04-E02B; A04-E03B; A05-G01E; A05-J; A05-J02; A08-C06; A08-C08;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 0271U; 0776U ; 1278U ; 1455U ; 5243U ; 5306U

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:
Key Serials: 0002 0004 0020 0034 0054 0057 0060 0063 0066 0147 0150 0153 0156
0159 0162 0165 0168 0207 0209 0218 0226 0759 0760 1283 1294 1760 2211 2220 2232
2285 2299 2300 2303 2572 3191 3217
Multipunch Codes: 017 034 036 038 150 153 207 209 311 341 51& 532 536 55& 684
017 02& 034 040 06- 061 062 063 08& 10- 141 15- 165 17& 17- 18& 18- 19& 19- 20&
26& 273 308 315 341 48- 654 688
SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C1994-027848

DERWENT-ACC-NO: 2001-074624
DERWENT-WEEK: 200115

TITLE: Blocked polyisocyanate composition useful for one pack coating compositions contains malonic acid diester as blocking agent and monoalcohol as
active hydrogen containing compound

PATENT-ASSIGNEE: ASAHI KASEI KOGYO KK[ASAH]

PRIORITY-DATA: 1999JP-0102447 (April 9, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2000290493 A	October 17, 2000	N/A	009	C08L 075/04

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP2000290493A	N/A	1999JP-0102447	April 9, 1999

INT-CL (IPC): C08G018/80; C08K005/01 ; C08L075/04 ; C09D175/04

ABSTRACTED-PUB-NO: JP2000290493A
BASIC-ABSTRACT: NOVELTY - A blocked polyisocyanate composition contains: (1)
blocked polyisocyanate using blocking agent containing a malonic acid diester;
(2) monofunctional active hydrogen-containing compound containing a monoalcohol
with a boiling point of less than or equal to 200 deg. C; and (3) solvent
component containing toluene.

DETAILED DESCRIPTION - A blocked polyisocyanate composition contains: (1)
blocked polyisocyanate obtained by blocking a polyisocyanate as isocyanurate
type polyisocyanate derived from an aliphatic and/or an alicyclic diisocyanate
with a blocking agent containing a malonic acid diester (greater than or
equaling 50equivalent% per isocyanate groups); (2) monofunctional active
hydrogen-containing compound containing a monoalcohol with a boiling point of
less than or equaling 200 deg. C; and (3) solvent component containing toluene
at least partly. An INDEPENDENT CLAIM is also included for one pack

coating
compositions consisting of the blocked polyisocyanate compositions and polyhydroxyl compounds.

USE - The block polyisocyanate compositions are useful for top and intermediate
coats for cars, chipping-resistant coatings, electrodeposition coatings,
coatings for car parts suitable for low temperature baking for plastic substrates, car repair coatings, pre-coated metals and corrosion-proof sheet
steel for metal products such as household electric appliances and business
machines, plastic coatings, adhesives, adhesion-imparting agents and sealing
materials.

ADVANTAGE - The blocked polyisocyanate compositions have excellent curing
characteristics at a low temperature and storage stability and are not liable
to crystallize at a low temperature. The one pack coating compositions also
have excellent low temperature curing characteristics and storage stability.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:
BLOCK COMPOSITION USEFUL ONE PACK COATING COMPOSITION CONTAIN MALONIC ACID
BLOCK AGENT ACTIVE HYDROGEN CONTAIN COMPOUND

DERWENT-CLASS: A82 A85 G02 M13

CPI-CODES: A02-C; A05-G01E1; A08-S02; A12-B04C; G02-A02H; G02-A05E; M13-H05;

ENHANCED-POLYMER-INDEXING:
Polymer Index [1.1]
018 ; P0000
Polymer Index [1.2]
018 ; ND00 ; Q9999 Q7114*R ; Q9999 Q9234 Q9212 ; N9999 N7056 N7034 N7023 ; B9999 B4159 B4091 B3838 B3747 ; B9999 B3532 B3372 ; B9999 B4988*R B4977 B4740 ; Q9999 Q6644*R ; Q9999 Q7681*R ; Q9999 Q7330*R ; K9665
Polymer Index [1.3]
018 ; D01 D11 D10 D13*R D50 F73 ; A999 A157*R
Polymer Index [1.4]
018 ; D01 D11 D10 D50 D63 F90 F41 E28 E00 ; A999 A180

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C2001-021456

DERWENT-ACC-NO: 2000-090056
DERWENT-WEEK: 200017

TITLE: Monomer composition for production of vinyl polymer - contains vinyl monomer having methane tricarboxylic monoamide unit and monoalcohol and/or diol

PATENT-ASSIGNEE: ASAHI KASEI KOGYO KK[ASAH]

PRIORITY-DATA: 1997JP-0236995 (September 2, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 11080313 A	March 26, 1999	N/A	012	C08G 018/80

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 11080313A	N/A	1997JP-0236995	September 2, 1997

INT-CL (IPC): C08F026/02; C08G018/80 ; C08G018/81 ; C09D175/04 ; C09J175/04

ABSTRACTED-PUB-NO: JP 11080313A

BASIC-ABSTRACT: NOVELTY - A monomer composition contains: (a) a vinyl monomer having a methane tricarboxylic monoamide unit; and (B) a monoalcohol and/or diol.

USE - The monomer composition is used in producing the vinyl polymer to obtain a one-component thermosetting composition. The thermosetting composition is used in an automobile over coat/intermediate coat, chipping-resistant coating, electrodeposition paint, coating for automobile parts, including a bumper, coating for repairing automobile, precoating metal/rust preservative steel sheet for metal prods., including household electrical appliances, office machines, coating for building materials, coating for plastics, including polypropylene, acrylonitrile-butadiene-styrene resin, adhesive, adhesion-providing agent, sealing material.

ADVANTAGE - The vinyl monomer composition. has low crystallinity and high polymerization stability. The resulting one-component thermosetting

composition. has superior low-temp. setting, shelf life stability, smoothness,
coating appearance, including glossiness.

CHOSEN-DRAWING: Dwg.0/2

TITLE-TERMS:
MONOMER COMPOSITION PRODUCE VINYL POLYMER CONTAIN VINYL MONOMER METHANE UNIT
DIOL

DERWENT-CLASS: A14 A41 A82 E19 G02 M13

CPI-CODES: A04-D; A05-G01E1; A12-B01; A12-B01K; E10-E04H; E10-E04L; G02-A02C;
G02-A02D; G02-A02H; G03-B02D; G03-B02E4; G04-B02; M14-K;

CHEMICAL-CODES:
Chemical Indexing M3 *01*
Fragmentation Code
H4 H401 H402 H481 H482 H581 H8 M210 M211 M212
M213 M214 M215 M216 M220 M221 M231 M232 M233 M272
M280 M281 M311 M312 M313 M314 M315 M316 M320 M321
M322 M331 M332 M333 M340 M342 M383 M391 M392 M416
M620 M781 M782 M903 M904 Q020 Q030 Q130 Q331 Q332
Q462 Q464
Markush Compounds
200008-IOA01-K 200008-IOA01-M 200008-IOA01-U

ENHANCED-POLYMER-INDEXING:
Polymer Index [1.1]
018 ; G0022*R D01 D51 D53 D12 D10 D58 F95 F70 ; H0011*R ; S9999 S1627 S1605 ; L9999 L2528 L2506 ; L9999 L2664 L2506
Polymer Index [1.2]
018 ; Q9999 Q9234 Q9212 ; Q9999 Q9289 Q9212 ; B9999 B4193 B4091 B3838 B3747 ; B9999 B3816 B3747 ; Q9999 Q7681*R ; Q9999 Q7330*R ; Q9999 Q7136 Q7114 ; Q9999 Q6826*R ; B9999 B5301 B5298 B5276 ; Q9999 Q6644*R ; Q9999 Q9007 ; Q9999 Q9449 Q8173 ; Q9999 Q7192 Q7114 ; ND01 ; B9999 B3532 B3372 ; B9999 B4988*R B4977 B4740 ; K9665 ; B9999 B4411 B4400 B4240
Polymer Index [1.3]
018 ; D01 F27 F26 F28 ; A999 A475
Polymer Index [2.1]
018 ; R00964 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D83 ; H0000 ; P1150 ; P1343
Polymer Index [2.2]
018 ; R00817 G0475 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D83 F12 ; R00806 G0828 G0817 D01 D02 D12 D10 D51 D54 D56 D58 D84 ; R00708 G0102 G0022 D01 D02 D12 D10 D19 D18 D31 D51 D53 D58 D76 D88 ; H0033 H0011 ; P0328 ; P1741 ; P0088 ; P0191
Polymer Index [2.3]
018 ; B9999 B5447 B5414 B5403 B5276 ; K9574 K9483 ; K9676*R

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C2000-025261

DERWENT-ACC-NO: 1999-186355
DERWENT-WEEK: 199919

TITLE: Curable composition used in car paint - comprises active methylenic
block isocyanate group-containing vinyl polymer and mono-alcohols and/or diols

PATENT-ASSIGNEE: ASAHI KASEI KOGYO KK[ASAH]

PRIORITY-DATA: 1997JP-0210216 (July 22, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 11035658 A	February 9, 1999	N/A	009	C08G 018/80

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 11035658A	N/A	1997JP-0210216	July 22, 1997

INT-CL (IPC): C08G018/80; C08G018/81 ; C09D175/04 ; C09J175/04

ABSTRACTED-PUB-NO: JP 11035658A
BASIC-ABSTRACT: Curable compsn. comprises: (A) active methylenic block isocyanate gp.-contg . vinyl polymer obtained by reacting an isocyanate
gp.-contg. vinyl polymer (average isocyanate functional gp. no. = 2-25 and Mn =
1,000-20,000) with an active methylenic cpd. at least contg. diester malonate;
and (B) monoalcohols and/or diols with b.pt. up to 250 deg. C. Mol ratio of
OH-gp. in (B) vs. blocked isocyanate gp. in (A) is 0.2-10.

One pack liq. thermosetting compsn. comprises the curable compsn. and polyols.

USE - Used in car paint, car repair paint, precoated metals for office goods,
corrosion-proof steel plate, sealant, etc..

ADVANTAGE - Product has good low temp. curability, storage stability and coated
appearance.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:
CURE COMPOSITION CAR PAINT COMPRISE ACTIVE BLOCK ISOCYANATE GROUP CONTAIN VINYL

POLYMER MONO

DERWENT-CLASS: A13 A14 A25 A82 G02 G03

CPI-CODES: A05-G01E1; A10-B01; A12-B01K; A12-B04; G02-A02H; G02-A05E;

ENHANCED-POLYMER-INDEXING:
Polymer Index [1.1]
018 ; G0022*R D01 D51 D53 ; R00708 G0102 G0022 D01 D02 D12 D10 D19 D18 D31 D51 D53 D58 D76 D88 ; R00657 G0395 G0384 G0339 G0260 G0022 D01 D11 D10 D12 D26 D51 D53 D58 D63 D88 F41 F89 ; R01130 G0351 G0340 G0339 G0260 G0022 D01 D11 D10 D12 D26 D51 D53 D58 D63 D87 F41 F89 ; R24054 G0384 G0339 G0260 G0022 D01 D11 D10 D12 D26 D51 D53 D58 D63 D87 F41 F73 F89 ; H0033 H0011 ; L9999 L2528 L2506 ; H0328 ; L9999 L2391 ; L9999 L2073 ; M9999 M2073 ; S9999 S1627 S1605 ; P1741 ; P0088
Polymer Index [1.2]
018 ; ND04 ; ND01 ; Q9999 Q7158*R Q7114 ; Q9999 Q9234 Q9212 ; N9999 N6917 ; K9552 K9483 ; Q9999 Q7192 Q7114 ; Q9999 Q7136 Q7114 ; Q9999 Q9007 ; B9999 B4988*R B4977 B4740 ; K9665 ; B9999 B3532 B3372 ; K9927 ; B9999 B3678 B3554
Polymer Index [1.3]
018 ; R00426 D01 D11 D10 D50 D88 F12 F13 ; C999 C088*R C000 ; C999 C293
Polymer Index [1.4]
018 ; G1025*R G0997 D01 F28 F26 G1003*R F27 ; A999 A157*R
Polymer Index [1.5]
018 ; D01 D11 D10 D50 D88 F53 ; A999 A033
Polymer Index [1.6]
018 ; D01 G2595*R D11 D10 D50 D63 D86 F41 G3430 D02 D19 D18 D31 D76 D88 ; R01135 D01 D11 D10 D50 D63 D84 F41 F89 ; R00862 D01 D02 D11 D10 D19 D18 D31 D50 D76 D87 ; R08574 D01 D11 D10 D50 D63 D86 F34 F41 F89 ; A999 A475 ; A999 A771

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C1999-054878

DERWENT-ACC-NO: 1998-537531
DERWENT-WEEK: 199940

TITLE: Curable composition for use in paints - comprises active methylenic
block poly:isocyanate; metal chelate(s); mono- and/or di-alcohol(s) and chelating agent

PATENT-ASSIGNEE: ASAHI KASEI KOGYO KK[ASAH]

PRIORITY-DATA: 1997JP-0042662 (February 26, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 10237154 A	September 8, 1998	N/A	010	C08G 018/80

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 10237154A	N/A	1997JP-0042662	February 26, 1997

INT-CL (IPC): C08G018/80; C08L075/04

ABSTRACTED-PUB-NO: JP 10237154A
BASIC-ABSTRACT: Curable compsn. comprises (a) active methylenic block polyisocyanate obtained by reacting polyisocyanate and an active methylenic
cpd., (b) metal chelates wherein the metal is Al, Ti and Zr, and/or alcoholate
thereof, (c) mono- and/or di-alcohols and (d) a chelating agent.

Also claimed is liq. type thermocurable compsn. comprising the curable compsn.
and (e) polyvalent hydroxy cpd..

USE - Used in car paints (top and middle coat), anti-chipping paints, electrodeposition paints, car parts paint, etc..

ADVANTAGE - Product excels in low temp. curability and storage stability while
retaining resistance to heat yellowing.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:
CURE COMPOSITION PAINT COMPRISE ACTIVE BLOCK POLY ISOCYANATE METAL CHELATE MONO
DI ALCOHOL CHELATE AGENT

DERWENT-CLASS: A25 A82 G02 M13

CPI-CODES: A08-C09; A08-C09A; A08-D04A; A08-D05; A12-B01; A12-T05;
G02-A03;
M13-H05;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 0304U; 1068U ; 1345U ; 1711U

ENHANCED-POLYMER-INDEXING:
Polymer Index [1.1]
018 ; R00420 G1070 G0997 D01 D11 D10 D50 D86 F29 F26 ; G1843*R D01 F73 G1854*R G1843 D10*R D13*R ; R01455 G1854 G1843 D01 D11 D10 D50 D88 F73 ; H0022 H0011 ; H0259 ; L9999 L2528 L2506 ; L9999 L2620 L2506 ; M9999 M2164 M2153 ; L9999 L2391 ; L9999 L2164 L2153 ; P1592*R
F77 D01 ; P1638 P1592 F77 D01
Polymer Index [1.2]
018 ; ND04 ; B9999 B4988*R B4977 B4740 ; K9665 ; B9999 B3532 B3372 ; B9999 B4682 B4568 ; Q9999 Q7114*R ; Q9999 Q7158*R Q7114 ; Q9999 Q9234 Q9212 ; Q9999 Q9303 Q9212 ; B9999 B4159 B4091 B3838 B3747
Polymer Index [1.3]
018 ; H0226

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C1998-161549

DERWENT-ACC-NO: 1998-371098
DERWENT-WEEK: 199833

TITLE: Curing agent composition used e.g. in electroplating paints - comprises
active methylene-based block poly:isocyanate, aluminium-chelate or titanium-chelate. and mono- and=or di-alcohol

PATENT-ASSIGNEE: ASAHI KASEI KOGYO KK[ASAH]

PRIORITY-DATA: 1996JP-0318545 (November 15, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 10147627 A	June 2, 1998	N/A	010	C08G 018/80

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 10147627A	N/A	1996JP-0318545	November 15, 1996

INT-CL (IPC): C08G018/22; C08G018/80 ; C09D175/04

ABSTRACTED-PUB-NO: JP 10147627A
BASIC-ABSTRACT: Curing agent composition comprises: (a) active methylene-based
block polyisocyanate; (b) aluminium-chelate or Ti-chelate; and (c) (mono-
and/or di-)alcohols.

USE - Used in paints, electroplating paint, car repair paint, precoated metal
for electric/office equipments, adhesives and sealants.

ADVANTAGE - Product excels in low temperature curability, storage stability
without causing yellowness by heating.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:
CURE AGENT COMPOSITION ELECTROPLATING PAINT COMPRISE ACTIVE METHYLENE BASED
BLOCK POLY ISOCYANATE ALUMINIUM CHELATE TITANIUM CHELATE MONO AND=OR DI ALCOHOL

DERWENT-CLASS: A25 A82 G02

CPI-CODES: A08-C; A08-C09; A08-C09A; A08-D; A08-D04A; A08-D05; A12-B01; G02-A03; G03-B01; G03-B02; G04-B02;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 1056S

ENHANCED-POLYMER-INDEXING:
Polymer Index [1.1]
018 ; G1854*R G1843 D01 F73 G1945*R ; H0011*R ; P0000 ; M9999 M2391
Polymer Index [1.2]
018 ; ND00 ; Q9999 Q7158*R Q7114 ; Q9999 Q9234 Q9212 ; Q9999 Q7330*R
; Q9999 Q9449 Q8173 ; Q9999 Q6644*R ; Q9999 Q9007 ; K9483*R ; K9552 K9483 ; K9676*R ; K9712 K9676 ; N9999 N6917 ; B9999 B4988*R B4977 B4740 ; K9665 ; B9999 B3532 B3372 ; B9999 B4273 B4240 ; N9999 N6177*R
Polymer Index [1.3]
018 ; D01 D61*R Al 3A ; D01 D61*R Ti 4B Tr ; D01 F28 F26 F29 ; A999 A157*R ; A999 A771
Polymer Index [2.1]
018 ; G1456*R G1445 G4024 D01 D63 F41 F90 E00 E28 D11 D10 D50 D87 ; G1854*R G1843 D01 F73 G1945*R ; H0022 H0011 ; P0635*R F70 D01 ; L9999 L2528 L2506 ; L9999 L2028 ; L9999 L2391 ; L9999 L2824 ; M9999 M2824 ; S9999 S1627 S1605
Polymer Index [2.2]
018 ; ND00 ; Q9999 Q7158*R Q7114 ; Q9999 Q9234 Q9212 ; Q9999 Q7330*R
; Q9999 Q9449 Q8173 ; Q9999 Q6644*R ; Q9999 Q9007 ; K9483*R ; K9552 K9483 ; K9676*R ; K9712 K9676 ; N9999 N6917 ; B9999 B4988*R B4977 B4740 ; K9665 ; B9999 B3532 B3372 ; B9999 B4273 B4240 ; N9999 N6177*R
Polymer Index [2.3]
018 ; B9999 B4397 B4240 ; K9870 K9847 K9790
Polymer Index [2.4]
018 ; D01 D11 D10 D50 D63 D87 F89 F41 F23 ; H0226
Polymer Index [2.5]
018 ; R00304 G3496 D01 D10 D11 D50 D84 F26 F27 ; H0226
Polymer Index [2.6]
018 ; R01068 D01 D11 D10 D50 D61 D81 F27 F26 Na 1A ; C999 C000*R ; C999 C102 C000 ; C999 C306 ; C999 C271
Polymer Index [2.7]
018 ; G2595*R D01 D11 D10 D50 D63 D86 F41 ; A999 A475
Polymer Index [2.8]
018 ; D01 D11 D10 D50 D61*R D93 F23 O* 6A Al 3A ; A999 A157*R

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C1998-113262

DERWENT-ACC-NO: 1997-532947
DERWENT-WEEK: 199749

TITLE: Thermosetting composition, for intermediate and top coats for cars,
etc. - is obtained by heating at specific temperature a composition containing
active methylene block poly:isocyanate and poly:hydroxyl compound, etc., having
improved storage stability

PATENT-ASSIGNEE: ASAHI KASEI KOGYO KK[ASAH]

PRIORITY-DATA: 1996JP-0064036 (March 21, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 09255915 A	September 30, 1997	N/A	009	C09D 175/04

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 09255915A	N/A	1996JP-0064036	March 21, 1996

INT-CL (IPC): C08G018/80; C09D175/04

ABSTRACTED-PUB-NO: JP 09255915A
BASIC-ABSTRACT: The thermosetting composition suitable for coatings comprises
obtaining by heating at 40-150 deg. C a composition containing (A) an active
methylene block polyisocyanate and (B) a polyhydroxyl compound in the presence
of (C)mono- and/or difunctional active hydrogen-containing compounds under
conditions containing a non-volatile component of 10-90wt.%.

Also claimed is a manufacturing method for the thermosetting compositions.

USE - The thermosetting compositions are useful for intermediate and top coats
for cars, chipping resistant coatings, electro-deposition coatings, car parts
coatings, car repair paints, precoat metals and rustproof sheet steel for
household electric appliances and business machines, coatings for building
materials and plastics, adhesives, adhesion- imparting agents and sealing
materials.

ADVANTAGE - The thermosetting compositions have excellent low temperature
curing properties and much improved storage stability.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:
THERMOSETTING COMPOSITION INTERMEDIATE TOP COAT CAR OBTAIN HEAT SPECIFIC
TEMPERATURE COMPOSITION CONTAIN ACTIVE METHYLENE BLOCK POLY ISOCYANATE POLY
HYDROXYL COMPOUND IMPROVE STORAGE STABILISED

DERWENT-CLASS: A25 A82 G02

CPI-CODES: A05-G01A; A05-G01E1; A10-D; A12-B01K; G02-A02H; G02-A05; G02-A05B;
G02-A05E; G04-B02;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 1068U; 1139U

ENHANCED-POLYMER-INDEXING:
Polymer Index [1.1]
018 ; G1854*R G1843 D01 F73 G1945*R ; G1025*R G0997 D01 F28 F26 ; P0000 ; H0011*R ; L9999 L2528 L2506 ; M9999 M2391 ; H0328 ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; K9665
Polymer Index [1.2]
018 ; ND01 ; Q9999 Q7114*R ; Q9999 Q7158*R Q7114 ; N9999 N6177*R ; Q9999 Q9234 Q9212 ; B9999 B3816 B3747 ; N9999 N7147 N7034 N7023 ; N9999 N7056 N7034 N7023 ; Q9999 Q7158*R Q7114 ; Q9999 Q7192 Q7114 ; Q9999 Q7136 Q7114 ; Q9999 Q7681*R ; Q9999 Q7330*R ; Q9999 Q8173*R ; Q9999 Q6826*R ; K9676*R ; K9483*R ; K9574 K9483 ; Q9999 Q6644*R ; Q9999 Q9007 ; B9999 B3532 B3372
Polymer Index [1.3]
018 ; H0226
Polymer Index [2.1]
018 ; P0088*R ; M9999 M2073 ; L9999 L2391 ; L9999 L2073 ; H0328 ; K9665 ; M9999 M2391
Polymer Index [2.2]
018 ; ND01 ; Q9999 Q7114*R ; Q9999 Q7158*R Q7114 ; N9999 N6177*R ; Q9999 Q9234 Q9212 ; B9999 B3816 B3747 ; N9999 N7147 N7034 N7023 ; N9999 N7056 N7034 N7023 ; Q9999 Q7158*R Q7114 ; Q9999 Q7192 Q7114 ; Q9999 Q7136 Q7114 ; Q9999 Q7681*R ; Q9999 Q7330*R ; Q9999 Q8173*R ; Q9999 Q6826*R ; K9676*R ; K9483*R ; K9574 K9483 ; Q9999 Q6644*R ; Q9999 Q9007 ; B9999 B3532 B3372
Polymer Index [2.3]
018 ; K9370 ; B9999 B3554*R
Polymer Index [2.4]
018 ; R00304 G3496 D01 D10 D11 D50 D84 F26 F27 ; H0226
Polymer Index [2.5]
018 ; R01455 G1854 G1843 D01 D11 D10 D50 D88 F73 ; A999 A157*R
Polymer Index [2.6]
018 ; G3430 D01 D02 D11 D10 D19 D18 D31 D50 D76 D88 ; R01135 D01 D11 D10 D50 D63 D84 F41 F89 ; R00862 D01 D02 D11 D10 D19 D18 D31 D50 D76 D87 ; G2595*R D01 D11 D10 D50 D63 D86 F41 ; R08574 D01 D11 D10 D50 D63 D86 F34 F41 F89 ; A999 A475 ; A999 A771

Polymer Index [2.7]
018 ; E28 E00 D01 D11 D10 D50 D63 D87 F90 F41 ; A999 A793
Polymer Index [2.8]
018 ; D01 D11 D10 D50 D86 F23 ; A999 A793
Polymer Index [2.9]
018 ; R01068 D01 D11 D10 D50 D61 D81 F27 F26 Na 1A ; A999 A793

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C1997-170221

DERWENT-ACC-NO: 1996-450970
DERWENT-WEEK: 199645

TITLE: Yellowing resistant blocked poly:isocyanate used in paints for automobiles - prepd using isocyanurate type poly:isocyanate and malonate
di:ester and acetoacetate ester as blocking agent

PATENT-ASSIGNEE: ASAHI KASEI KOGYO KK[ASAH]

PRIORITY-DATA: 1995JP-0031953 (February 21, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 08225630 A	September 3, 1996	N/A	008	C08G 018/80

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 08225630A	N/A	1995JP-0031953	February 21, 1995

INT-CL (IPC): C08G018/75; C08G018/79 ; C08G018/80

ABSTRACTED-PUB-NO: JP 08225630A
BASIC-ABSTRACT: Blocked polyisocyanate is derived from aliphatic and/or alicyclic diisocyanate by blocking. The polyisocyanate is an isocyanurate type
polyisocyanate modified with hydroxyl cpd. and the blocking agent is a mixt. of
malonic acid diester (30-90 mol%) and acetoacetic acid ester (0-70 mol%).

USE - Used in car paints, chipping-resistant paint, precoat metal corrosion
resistant steel plate, adhesives and sealant.

ADVANTAGE - Product excels in low temp. curability, storage stability and
yellowness resistance.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:
YELLOW RESISTANCE BLOCK POLY ISOCYANATE PAINT AUTOMOBILE PREPARATION ISOCYANURATE TYPE POLY ISOCYANATE MALONATE DI ESTER ACETOACETATE ESTER BLOCK
AGENT

DERWENT-CLASS: A25 A81 A82 G02 G03 M13

CPI-CODES: A08-C06; A08-C09; A08-D; A08-D04A; A12-A05; A12-B01;

A12-B04;
A12-R08; A12-T05; G02-A03; G02-A05; G02-A05E; G03-B01; G03-B02;
G04-B02;
M13-H05;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 1711U

ENHANCED-POLYMER-INDEXING:
Polymer Index [1.1]
018 ; R01455 G1854 G1843 D01 D11 D10 D50 D88 F73 ; R00831 G1036 G1025 G0997 D01 D11 D10 D50 D84 F28 F26 ; H0022 H0011 ; H0259 ; L9999 L2528 L2506 ; L9999 L2620 L2506 ; P1592*R F77 D01
Polymer Index [1.2]
018 ; R01455 G1854 G1843 D01 D11 D10 D50 D88 F73 ; R00420 G1070 G0997 D01 D11 D10 D50 D86 F29 F26 ; H0022 H0011 ; H0259 ; L9999 L2528 L2506 ; L9999 L2620 L2506 ; P1592*R F77 D01
Polymer Index [1.3]
018 ; ND01 ; Q9999 Q7158*R Q7114 ; K9665 ; N9999 N7147 N7034 N7023 ; N9999 N7067 N7034 N7023 ; B9999 B5243*R B4740 ; B9999 B4262 B4240 ; Q9999 Q6644*R ; Q9999 Q7192 Q7114 ; B9999 B5287 B5276 ; Q9999 Q9234 Q9212 ; B9999 B3532 B3372 ; B9999 B3678 B3554 ; B9999 B4988*R B4977 B4740 ; K9676*R ; K9552 K9483 ; Q9999 Q9007
Polymer Index [1.4]
018 ; D01 D11 D10 D50 D61*R D93 F16 F36 F35 ; C999 C102 C000 ; C999 C306
Polymer Index [1.5]
018 ; R01711 D00 D60 H* O* 6A P* 5A ; C999 C204 ; C999 C306
Polymer Index [1.6]
018 ; D01 D11 D10 D50 D63 D87 F90 F41 E28 E00 ; D01 D11 D10 D50 D63 D86 F23 F89 F41 ; R01068 D01 D11 D10 D50 D61 D81 F27 F26 Na 1A ; R00304 G3496 D01 D10 D11 D50 D84 F26 F27 ; C999 C180 ; C999 C306
Polymer Index [1.7]
018 ; G3430 D01 D02 D11 D10 D19 D18 D31 D50 D76 D88 ; A999 A475
Polymer Index [2.1]
018 ; R01455 G1854 G1843 D01 D11 D10 D50 D88 F73 ; R00831 G1036 G1025 G0997 D01 D11 D10 D50 D84 F28 F26 ; R00420 G1070 G0997 D01 D11 D10 D50 D86 F29 F26 ; P1592*R F77 D01 ; H0033 H0011 ; S9999 S1627 S1605 ; M9999 M2073
Polymer Index [2.2]
018 ; ND01 ; Q9999 Q7158*R Q7114 ; K9665 ; N9999 N7147 N7034 N7023 ; N9999 N7067 N7034 N7023 ; B9999 B5243*R B4740 ; B9999 B4262 B4240 ; Q9999 Q6644*R ; Q9999 Q7192 Q7114 ; B9999 B5287 B5276 ; Q9999 Q9234 Q9212 ; B9999 B3532 B3372 ; B9999 B3678 B3554 ; B9999 B4988*R B4977 B4740 ; K9676*R ; K9552 K9483 ; Q9999 Q9007
Polymer Index [2.3]
018 ; G2595*R D01 D11 D10 D50 D63 D86 F41 ; R01135 D01 D11 D10 D50 D63 D84 F41 F89 ; R00862 D01 D02 D11 D10 D19 D18 D31 D50 D76 D87 ; R08574 D01 D11 D10 D50 D63 D86 F34 F41 F89 ; A999 A475 ; A999 A771

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C1996-141344

DERWENT-ACC-NO: 1988-206162
DERWENT-WEEK: 198830

TITLE: Aq. electrophoretic coating compsn. contg. oligo:urethane-urea -
derived from oligo:amido-amine or epoxy-amine and reactive mixt. of ester and
isocyanate

INVENTOR: FINK, H; FRIEDRICH, H ; KRAWTSCHEN, W I ; LEPIN, W F ; PRONINA, I A
; PUDELL, J ; RUDKOWSKAJ, L A ; WASALLJAWA, O W

PATENT-ASSIGNEE: VEB LACKFAB LEIPZIG[LEIPN]

PRIORITY-DATA: 1986DD-0297566 (December 15, 1986)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DD 254583 A	March 2, 1988	N/A	004	N/A

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
DD 254583A	N/A	1986DD-0297566	December 15, 1986

INT-CL (IPC): C09D005/44; C25D013/04

ABSTRACTED-PUB-NO: DD 254583A
BASIC-ABSTRACT: Aq. coating materials esp. for cathodic electrophoretic lacquering of metals, consist of binders based on oligourethane-ureas (I),
obtd. by reacting oligomers (II) contg. amine gps. and partly blocked isocyanates (III), pigments, fillers inhibitors, solvents, neutralising acids
and reactive additives (IV).

The novel features are that (II) are oligoamidoamines (IIA), obtd. by reacting
esters of monomeric and/or dimeric fatty acids with aliphatic polyamines,
and/or epoxyamines (IIB), which are reaction prods. of polyamines and/or
oligoamidoamines with bisphenol A epoxied resins, with an amine equiv. of
100-400; and (IV) are 1-15 (wt.)% esters (IVA) of aliphatic dicarboxylic acids
with 1-5 C mono-alcohol(s) and 1-10% low mol. diisocyanates (IVB), completely
blocked with mixts. of 1-5 C monohydric alcohols.

USE/ADVANTAGE - The coatings give good corrosion protection and throw and flow
are inproved. The coatings are more strongly, crosslinked than usual and the
films are nonporous and flawless.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:
AQUEOUS ELECTROPHORESIS COATING COMPOSITION CONTAIN OLIGO URETHANE UREA DERIVATIVE OLIGO AMIDO AMINE EPOXY AMINE REACT MIXTURE ESTER ISOCYANATE

DERWENT-CLASS: A82 E19 G02 M11

CPI-CODES: A05-G01E1; A05-J04; A11-B05A; A12-B01K; A12-B04C; E07-D09C; E10-A12C; E10-A13B; E10-G02H; G02-A02H; G02-A05E; M11-G; M14-K;

CHEMICAL-CODES:
Chemical Indexing M3 *01*
Fragmentation Code
J0 J012 J2 J272 L560 M210 M211 M212 M213 M214
M215 M231 M232 M233 M272 M282 M311 M312 M313 M314
M315 M316 M320 M321 M331 M332 M333 M342 M382 M391
M416 M620 M781 M903 M904 Q332 Q462 Q465
Markush Compounds
198830-A1401-U
Registry Numbers
3102R 1678D

UNLINKED-DERWENT-REGISTRY-NUMBERS: 0304U

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:
Key Serials: 0004 0231 3183 1286 1294 1300 1373 1389 1407 1601 1745 1766 3132
1999 3206 2000 2020 2072 2148 2152 2208 2211 2303 2318 2321 2420 2422 2439 2493
2578 2607 2653 2654 2661 2718 2728 3293
Multipunch Codes: 014 038 04- 075 149 150 154 155 157 174 185 191 199 209 212
220 221 226 23- 231 239 24& 26& 298 305 308 316 333 336 344 346 364 365 40- 400
431 432 47& 473 477 52& 53& 541 545 575 58- 583 595 596 597 602 656 720 723
SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C1988-092036

L Number	Hits	Search Text	DB	Time stamp
1	20849	malonate or acetoacetate	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/27 10:25
2	1964	(malonate or acetoacetate) and (diisocyanate or polyisocyanate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/27 10:27
3	349	((malonate or acetoacetate) and (diisocyanate or polyisocyanate)) and (pentanol or ethylhexanol or hexanol)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/27 10:27
4	257	(((malonate or acetoacetate) and (diisocyanate or polyisocyanate)) and (pentanol or ethylhexanol or hexanol)) and (blocked or blocking or masked or masking)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/27 10:51
5	85	((((malonate or acetoacetate) and (diisocyanate or polyisocyanate)) and (pentanol or ethylhexanol or hexanol)) and (blocked or blocking or masked or masking)) and malonate and acetoacetate	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/27 10:53
6	32	(((((malonate or acetoacetate) and (diisocyanate or polyisocyanate)) and (pentanol or ethylhexanol or hexanol)) and (blocked or blocking or masked or masking)) and malonate and acetoacetate) not cresol	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/27 11:25
7	0	isocynatatoethyl adj methacrylate	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/27 11:26
8	1271	isocyanatoethyl adj methacrylate	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/27 11:26
9	76	(isocyanatoethyl adj methacrylate) and (malonate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/27 11:27
10	23	((isocyanatoethyl adj methacrylate) and (malonate)) and (blocked or blocking or masked or masking)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/27 11:27

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L7 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 2000:733160 CAPLUS
DN 133:310961
TI Preparation of blocked **polyisocyanate**-based one liquid-type coating composition
IN Suzuki, Shinji; Hamatsu, Takao
PA Asahi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L075-04
ICS C08G018-80; C08K005-01; C09D175-04
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000290493	A2	20001017	JP 1999-102447	19990409

AB Title compn. which is difficultly crystd. at low temp., is curable at low-temp., and has storage stability comprises (A) blocked isocyanurate-type **polyisocyanate** prepd. from aliph. and/or aliph. cyclic **diisocyanate** and malonic acid diester-contg. blocking agent, (B) monofunctional active hydrogen-contg. compd. contg. .gtoreq.1 monoalc. and with b.p. <200.degree., and (C) toluene-contg. solvents. Thus a compn. contg. hexamethylene **diisocyanate**-based **polyisocyanate** 100, di-Me malonate 53, Et acetoacetate 29, n-**butanol** 51, toluene 68 parts was prepd. showing gelation rate 77% at 80.degree. and 85% at 90.degree., and good crystn.-inhibiting property and storage stability.
ST blocked **polyisocyanate** polyurethane coating compn; malonic acid ester blocking agent blocked **polyisocyanate** compn
IT Alcohols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(compn. contg.; prepn. and properties of blocked **polyisocyanate**-based one liq.-type coating compn.)
IT Polyurethanes, uses
Polyurethanes, uses
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyisocyanurate-; prepn. of blocked **polyisocyanate**-based one liq.-type coating compn.)
IT Polyisocyanurates
Polyisocyanurates
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane-; prepn. of blocked **polyisocyanate**-based one liq.-type coating compn.)
IT Crystallization
(prepn. and properties of blocked **polyisocyanate**-based one liq.-type coating compn.)
IT Coating materials
(prepn. of blocked **polyisocyanate**-based one liq.-type coating compn.)
IT **105-53-3**, Diethyl malonate 123-51-3, Isopentanol 141-97-9, Ethyl acetoacetate
RL: NUU (Other use, unclassified); USES (Uses)
(blocking agent; prepn. of blocked **polyisocyanate**-based one liq.-type coating compn.)
IT 71-36-3, n-**Butanol**, uses 78-83-1, Isobutanol, uses 78-92-2,

2-**Butanol**
RL: NUU (Other use, unclassified); USES (Uses)
(compn. contg.; prepn. of blocked **polyisocyanate**-based one liq.-type coating compn.)

IT 127499-78-9P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of blocked **polyisocyanate**-based one liq.-type coating compn.)

IT 108-88-3, Toluene, uses
RL: NUU (Other use, unclassified); USES (Uses)
(solvent; prepn. of blocked **polyisocyanate**-based one liq.-type coating compn.)

L7 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1999:208628 CAPLUS
DN 130:267888
TI Monomer composition and production method of vinyl polymer
IN Usui, Taketoshi; Asahina, Yoshiyuki
PA Asahi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08G018-80
ICS C08G018-81; C08F026-02; C09D175-04; C09J175-04
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 37, 42

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11080313	A2	19990326	JP 1997-236995	19970902

PI JP 11080313 A2 19990326 JP 1997-236995 19970902

AB The curable one-component compn., with good storage stability and useful as coating, comprises a vinyl monomer contg. methane tricarboxylilc acid monoamide unit and a monoalc. and/or a diol, optionally a polyvalent hydroxy compd. Thus, 100 parts 2-isocyanatoethyl methacrylate reacted with 109 parts di-Et malonate in the presence of Na methylate followed by reaction with 96 parts BuOH to obtain a vinyl polymer, 61 parts of which was blended with 30 parts Bu methacrylate and 30 parts Bu acrylate in xylene and Bu acetate to give a thermosetting compn.

ST isocyanatoethyl methacrylate curable one component compn; polyol blocked isocyanate one component thermosetting; methacrylate acrylate isocyanatoethyl polymer blocked; blocked **polyisocyanate** curing agent polyol coating

IT Polyurethanes, preparation
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic, block; monomer compn. and prodn. method of vinyl polymer)

IT Crosslinking agents
(monomer compn. and prodn. method of vinyl polymer)

IT Coating materials
(one-component; monomer compn. and prodn. method of vinyl polymer)

IT Acrylic polymers, preparation
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane-, block; monomer compn. and prodn. method of vinyl polymer)

IT Coating materials
(thermosetting; monomer compn. and prodn. method of vinyl polymer)

IT Plastics, preparation
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermosetting; monomer compn. and prodn. method of vinyl polymer)

IT 71-36-3DP, **Butanol**, reaction products with isocyanate-pendent vinyl monomers and diol **105-53-3DP**, Diethyl malonate, reaction products with isocyanate-pendent vinyl polymers and monohydric alcs 123-86-4DP, Butyl acetate, reaction products with isocyanate-pendent vinyl polymers and monohydric alcs 141-97-9DP, Ethyl acetoacetate, reaction products with isocyanate-pendent vinyl polymers and monohydric alcs 30674-80-7DP, 2-Isocyanatoethyl methacrylate, reaction products with malonate ester, acetoacetate ester and monoalcs. 222037-13-0P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(monomer compn. and prodn. method of vinyl polymer)

L7 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1999:107040 CAPLUS
DN 130:169650
TI Blocked isocyanate-pendent vinyl polymer curing agent compositions and one-component thermosetting compositions for coatings using them
IN Usui, Taketoshi; Asahina, Yoshiyuki
PA Asahi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08G018-80
ICS C08G018-81; C09D175-04; C09J175-04
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11035658	A2	19990209	JP 1997-210216	19970722

AB Curing agent compns. contain (A) activated methylene-having blocked isocyanate-contg. vinyl polymers obtained by the reaction of NCO-contg. vinyl polymers with av. NCO functional group content 2-25 and Mn 1000-20,000 with .gtoreq.1 activated methylene compd. including malonate diesters and (B) monohydric alcs. and/or diols with b.p. .gtoreq.250.degree. at an equiv ratio of the OH in (B) to the blocked isocyanate in (A) of 0.2-10. Thermosetting compns. contain the curing agent compns. and polyols. Thus, 100 parts NCO-contg. vinyl polymer (prepd. from styrene 25, Bu methacrylate 25, Bu acrylate 20, and 2-isocyanatoethyl methacrylate 30 parts; av. NCO content 13, Mn 7000) reacted with 12.5 parts di-Et malonate and 2.5 parts Et acetoacetate at 80.degree. for 2 h, followed by reaction with 13.8 parts BuOH to obtain a blocked isocyanate-contg. vinyl polymer, 100 parts of which was blended with 80 parts Acrydic A 801 and dild. to give a thermosetting compn. with good curability at 80-90.degree. and storage stability.

ST blocked isocyanate vinyl polymer curing agent; malonate ester blocked isocyanate curing agent; polyol blocked isocyanate one component thermosetting; active methylene blocked isocyanate crosslinking agent; coating low temp thermosetting storage stability; styrene methacrylate acrylate isocyanatoethyl polymer blocked; acetoacetate blocked **polyisocyanate** curing agent polyol

IT Crosslinking agents
Methylene group
Protective groups
(blocked isocyanate-pendent vinyl polymer curing agent compns. for one-component thermosetting coating compns.)

IT Coating materials
(one-component; blocked isocyanate-pendent vinyl polymer curing agent compns. for one-component thermosetting coating compns.)

IT Coating materials
(storage-stable; blocked isocyanate-pendent vinyl polymer curing agent

compns. for one-component thermosetting coating compns.)

IT Coating materials
(thermosetting; blocked isocyanate-pendent vinyl polymer curing agent compns. for one-component thermosetting coating compns.)

IT 67-63-0DP, 2-Propanol, reaction products with isocyanate-pendent vinyl polymers and diesters, uses
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(blocked isocyanate-pendent vinyl polymer curing agent compns. for one-component thermosetting coating compns.)

IT 220451-05-8P, Acrydic A 801-butyl acrylate-butyl methacrylate-2-isocyanatoethyl methacrylate-styrene copolymer 220451-06-9P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(crosslinked; blocked isocyanate-pendent vinyl polymer curing agent compns. for one-component thermosetting coating compns.)

IT 71-36-3DP, **Butanol**, reaction products with isocyanate-pendent vinyl polymers and diesters **105-53-3DP**, Diethyl malonate, reaction products with isocyanate-pendent vinyl polymers and monohydric alcs. 141-97-9DP, Ethyl acetoacetate, reaction products with isocyanate-pendent vinyl polymers and monohydric alcs. 130480-37-4DP, Butyl acrylate-butyl methacrylate-2-isocyanatoethyl methacrylate-styrene copolymer, reaction products with malonate ester, acetoacetate ester, and **butanol** 220451-01-4DP, Butyl acrylate-butyl methacrylate-2-isocyanatoethyl methacrylate-methyl methacrylate copolymer, reaction products with malonate ester, acetoacetate ester, and monohydric alcs.
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(crosslinking agent; blocked isocyanate-pendent vinyl polymer curing agent compns. for one-component thermosetting coating compns.)

L7 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1998:586376 CAPLUS
DN 129:261801
TI Hardener compositions containing blocked polyisocyanates and one-liquid thermosetting polyurethane compositions containing the hardeners
IN Usui, Taketoshi; Asahina, Yoshiyuki
PA Asahi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08G018-80
ICS C08L075-04
CC 42-3 (Coatings, Inks, and Related Products)
Section cross-reference(s): 37
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10237154	A2	19980908	JP 1997-42662	19970226

AB Hardeners with improved storage stability contain (A) polyisocyanates blocked with active methylene compds., (B) chelates and/or alcoholates of Al, Ti, or Zr, (C) monoalcs. and/or di-alcs., and (D) chelating agents. One-liq. thermosetting polyurethane compns. useful for coatings showing low-temp. curability contain the hardeners and polyhydric compds. Thus, reacting 100 parts HMDI and 3.3 parts trimethylolpropane followed by treatment with Bu4N acetate, reacting 100 parts resulting isocyanurate **polyisocyanate**, 52 parts di-Et malonate, and 21 parts Et acetoacetate, adding 71 parts BuOH to the product to give a 60%-solids **polyisocyanate** soln., and mixing 100 parts of the soln., 4.6 parts Al tris(acetylacetonate) (I), and 4.9 parts acetylacetone (II) at 60.degree. for 1 h gave a hardener compn. showing no gelation or

coloration after a 1-mo storage. Then, mixing the hardener compn. 100, an acrylic polyol (Acrydic A 801) 184, I 4.6, MeOH 15, and II 4.9 parts, dilg. the compn. with solvents, spraying the dild. compn. on a polypropylene sheet, baking the coating at 80.degree. for 30 min, peeling off the coating film from the sheet, and impregnating the film in Me2CO for 24 h showed .gtoreq.85% wt. retention of the film (i.e., good curability).

ST blocked **polyisocyanate** hardener polyurethane coating; one liq polyurethane coating hardener; malonate acetoacetate blocking agent **polyisocyanate**; aluminum acetylacetonate blocked **polyisocyanate** hardener; metal chelate alcoholate hardener; acetylacetone chelating agent blocked **polyisocyanate**; hexamethylene **diisocyanate** trimethylolpropane copolymer isocyanurate hardener; acrylic polyol blocked **polyisocyanate** thermosetting coating; storage stability blocked **polyisocyanate** hardener

IT Storage
(-stable; blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic, coatings; blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT Crosslinking agents
Protective groups
(blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT Chelates
RL: MOA (Modifier or additive use); USES (Uses)
(blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT Chelating agents
(in blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT Polyurethanes, uses
Polyurethanes, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(polyisocyanurate-; blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT Polyisocyanurates
Polyisocyanurates
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(polyurethane-; blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT Coating materials
(thermosetting; blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT 555-31-7, Aluminum triisopropylate 13963-57-0, Aluminum tris(acetylacetonate) 14782-75-3, Ethyl acetoacetate aluminum diisopropylate 17501-44-9, Zirconium tetrakis(acetylacetonate) 17501-79-0

RL: MOA (Modifier or additive use); USES (Uses)
(blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT 28574-90-5DP, Hexamethylene **diisocyanate** trimer, reaction products with isocyanurate polyisocyanates
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(buret, hardeners; blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT 123-54-6, 2,4-Pentanedione, uses
RL: MOA (Modifier or additive use); USES (Uses)
(chelating agents; blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT 140435-05-8P, Acrydic A 801-hexamethylene **diisocyanate** copolymer 156179-18-9P 183121-77-9P, Acrydic A 801-hexamethylene **diisocyanate**-trimethylolpropane copolymer 197902-71-9P 209330-85-8P 213618-92-9P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(coatings; blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT **105-53-3DP**, Diethyl malonate, reaction products with isocyanurate polyisocyanates 141-97-9DP, Ethyl acetoacetate, reaction products with isocyanurated polyisocyanates 81544-19-6DP, Duranate 24A-100, reaction products with isocyanurate polyisocyanates 90651-35-7DP, Vestanat T 1890/100, reaction products with isocyanurate polyisocyanates 197808-90-5DP, Duranate P 301-75E, reaction products with isocyanurate polyisocyanates
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(hardeners; blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT 67-56-1, Methanol, uses 71-36-3, 1-**Butanol**, uses 107-88-0, 1,3-Butanediol
RL: NUU (Other use, unclassified); USES (Uses)
(in blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

IT 28182-81-2DP, Hexamethylene **diisocyanate** homopolymer, reaction products with di-Et malonate and Et acetoacetate 30322-28-2DP, Hexamethylene **diisocyanate**-trimethylolpropane copolymer, reaction products with di-Et malonate and Et acetoacetate
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(isocyanurate ring-contg., hardeners; blocked **polyisocyanate** compns. contg. metal chelates as storage-stable hardener compns. for one-liq. thermosetting polyurethane coatings)

L7 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1998:352160 CAPLUS
DN 129:82416
TI Curing agent compositions and low temperature-curable one-component thermosetting resin compositions therefrom
IN Usui, Taketoshi; Asahina, Yoshiyuki
PA Asahi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
IC ICM C08G018-80
ICS C08G018-22; C09D175-04
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 42
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10147627	A2	19980602	JP 1996-318545	19961115

AB The curing agent compns. comprise (a) blocked polyisocyanates prepd. by reaction of polyisocyanates with active methylene compds., (b) Al chelates and/or Ti chelates, and (c) monoalcs. and/or dialcs. The one-component thermosetting resin compns. with good storage stability contain (a), (b), (c), and (d) polyhydroxy compds. Thus, 100 parts isocyanurate-contg. **polyisocyanate** prepd. by reaction of 100 parts hexamethylene **diisocyanate** with 3.3 parts trimethylolpropane was reacted with 52 parts di-Et malonate, 21 parts Et acetoacetonate and added with n-BuOH to give a blocked **polyisocyanate**, which was mixed with 4.6 phr Al tris(acetylacetonate) (I) and BuOAc to give a curing agent compn. Then, 100 parts of the blocked **polyisocyanate** was mixed with 184 parts Acrydic A 801 (acrylic polyols, resin contents 50%), 46 parts 10- soln. of I, and solvents to give a compn. showing good storage stability, which was sprayed and cured to give a test piece showing good curability at 80.degree. and low yellowness by heating at 140.degree..

ST curing agent one liq thermosetting coating; hexamethylene **diisocyanate** trimethylol propane blocked **polyisocyanate**; diethyl malonate ethyl acetoacetonate block group; aluminum trisacetylacetonate catalyst low temp curable

IT Coating materials
(one-component; prepn. of low temp.-curable one-component thermosetting resin compns. from active methylene compd.-blocked polyisocyanates)

IT Crosslinking agents
(prepn. of curing agent compns. from active methylene compd.-blocked polyisocyanates)

IT Polyurethanes, preparation
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of low temp.-curable one-component thermosetting resin compns. from active methylene compd.-blocked polyisocyanates)

IT Coating materials
(thermosetting; prepn. of low temp.-curable one-component thermosetting resin compns. from active methylene compd.-blocked polyisocyanates)

IT 140435-05-8P 156179-18-9P 183121-77-9P, Acrydic A 801-hexamethylene **diisocyanate**-trimethylolpropane copolymer 197902-71-9P 209330-85-8P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of low temp.-curable one-component thermosetting resin compns. from active methylene compd.-blocked polyisocyanates)

IT 13963-57-0, Aluminum tris(acetylacetonate) 14284-96-9, Titanium tris(acetylacetonate) 15306-17-9
RL: CAT (Catalyst use); USES (Uses)
(prepn. of low temp.-curable one-component thermosetting resin compns. from active methylene compd.-blocked polyisocyanates and)

IT 71-36-3, 1-**Butanol**, uses 107-88-0, 1,3-Butanediol
RL: NUU (Other use, unclassified); USES (Uses)
(prepn. of low temp.-curable one-component thermosetting resin compns. from active methylene compd.-blocked polyisocyanates and)

IT **105-53-3DP**, Diethyl malonate, reaction products with polyisocyanates 141-97-9DP, Ethyl acetoacetate, reaction products with polyisocyanates

RL: IMF (Industrial manufacture); POF (Polymer in formulation); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of low temp.-curable one-component thermosetting resin compns. from active methylene compd.-blocked polyisocyanates of)

L7 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1997:654846 CAPLUS
DN 127:332862
TI Storage-stable and low-temperature-curable coating compositions and their manufacture
IN Usui, Taketoshi; Asahina, Yoshiyuki
PA Asahi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C09D175-04
ICS C08G018-80
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09255915	A2	19970930	JP 1996-64036	19960321

AB Title compns. are prepd. by heating active methylene compd.-blocked polyisocyanates and polyhydric compds. in the presence of mono- or di-functional active H compds. under a nonvolatile content of 10-90% and at 40-150.degree.. A mixt. of di-Et malonate- and Et acetoacetate-block polymeric HMDI 100, Acrydic A 801 (50% soln.) 252, BuOH 27, and org. solvent blend 68 parts was heated at 70.degree. for 1 h to form a compn., which was dild. with solvent blends to form a coating with Ford cup 4 viscosity of 20 s at 20.degree.and showing storage stability at 40.degree. for 1 mo and 100-120.degree. curability.
ST low temp curable polyol **polyisocyanate** coating; storage stability polyol **polyisocyanate** alc coating
IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic; manuf. of low-temp.-curable and storage-stable polyurethane coatings)
IT Coating materials
(manuf. of low-temp.-curable and storage-stable polyurethane coatings)
IT Alcohols, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(manuf. of low-temp.-curable and storage-stable polyurethane coatings)
IT Acrylic polymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane-; manuf. of low-temp.-curable and storage-stable polyurethane coatings)
IT **105-53-3DP**, Diethyl malonate, reaction products with polyisocyanates 141-97-9DP, Ethyl acetoacetate, reaction products with polyisocyanates 3779-63-3DP, reaction products with di-Et malonate and Et acetoacetate 50886-64-1DP, reaction products with di-Et malonate and Et acetoacetate 73666-46-3DP, Vestanat T 1890, reaction products with di-Et malonate and Et acetoacetate 91931-89-4DP, Duranate 24A, reaction products with di-Et malonate and Et acetoacetate 197808-90-5DP, Duranate P 301-75E, reaction products with di-Et malonate and Et acetoacetate
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(manuf. of low-temp.-curable and storage-stable polyurethane coatings)
IT 127499-78-9P, Acrydic A 801-HMDI isocyanurate copolymer 148277-95-6P 160243-82-3P 197022-90-5P 197902-71-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manuf. of low-temp.-curable and storage-stable polyurethane coatings)

IT 67-56-1, Methanol, reactions 67-63-0, Isopropanol, reactions 71-36-3, 1-**Butanol**, reactions 96-29-7, Methyl ethyl ketoxime 108-95-2, Phenol, reactions 111-76-2, Butyl Cellosolve
RL: RCT (Reactant); RACT (Reactant or reagent)
(manuf. of low-temp.-curable and storage-stable polyurethane coatings)

L7 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1996:678597 CAPLUS
DN 125:302441
TI Polyisocyanates blocked with malonate diesters and acetoacetate esters and storage-stable crosslinking compositions therefrom and one-liquid thermosetting resin compositions containing them curable at low temperatures
IN Usui, Taketoshi; Asahina, Yoshuki
PA Asahi Chemical Ind, Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08G018-80
ICS C08G018-75; C08G018-79
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 42
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08225630	A2	19960903	JP 1995-31953	19950221

AB The blocked polyisocyanates (A) comprise aliph. and/or alicyclic diisocyanates, which are modified with OH compds. and the resulting isocyanurates are blocked with mixts. comprising 30-90 equiv% malonate diesters and 10-70 equiv% acetoacetate esters, and the crosslinking compns. comprise A and alcs. with b.p. .ltoreq.200.degree. as solvents as the essential components. The curable one-liq. thermoplastic resin compns. contain polyhydric hydroxy compds. and A as the main components, are resistant to yellowing by heat, and are useful for coatings (with data), adhesives, tackifiers, and sealants (no data). Thus, 100 parts HDI and 1.2 part 1,3-butanediol were heated at 80.degree. for 2 h in the presence of tetrabutylammonium acetate and 100 parts of the resulting polyisocyanurate **polyisocyanate** were treated with 42 parts diEt malonate and 34 parts Et acetoacetate in xylene in the presence of NaOMe at 60.degree. for 6 h to give a blocked **polyisocyanate** (I), which was mixed with 14 parts BuOH to give a soln. exhibiting no crystn. on storing the soln. for 2 wk at 5.degree..

ST blocked **polyisocyanate** crosslinking agent; malonate ester blocking agent **polyisocyanate**; acetoacetate ester blocking agent **polyisocyanate**; storage stability blocked **polyisocyanate** crosslinking agent; yellowing resistance blocked **polyisocyanate** crosslinker; hexamethylene **diisocyanate** butanediol copolymer blocked crosslinker; **butanol** blocked **polyisocyanate** mixt crosslinker; thermosetting compn **polyisocyanate** crosslinker; coating blocked **polyisocyanate** crosslinking agent; adhesive blocked **polyisocyanate** crosslinking agent; sealant blocked **polyisocyanate** crosslinking agent

IT Crosslinking agents
(blocked polyisocyanates; storage-stable compns. for one-liq. thermosetting resin compns. curable at low temps.)

IT Coating materials
(blocking of aliph. and/or alicyclic **diisocyanate**-derived polyisocyanurates for hardeners for one-liq. thermosetting resins as)

IT Urethane polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(acrylic, coatings; with improved storage stability and resistance to yellowing by heat)
IT Urethane polymers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(isocyanate-terminated, blocked, crosslinking agents; storage-stable compns. for one-liq. thermosetting resin compns. curable at low temps.)
IT Acrylic polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyurethane-, coatings; with improved storage stability and resistance to yellowing by heat)
IT Discoloration prevention
(yellowing, f one-liq. thermosetting resins compns. contg. blocked polyisocyanates for)
IT 10534-59-5, Tetrabutylammonium acetate
RL: CAT (Catalyst use); USES (Uses)
(catalyst; for blocking of polyisocyanates with di-Et malonate and Et acetoacetate)
IT 183121-77-9P 183121-78-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(coatings; with improved storage stability and resistance to yellowing by heat)
IT **105-53-3DP**, Diethyl malonate, reaction products with polyisocyanates 141-97-9DP, Ethyl acetoacetate, reaction products with polyisocyanates 30322-28-2DP, Hexamethylene **diisocyanate** -trimethylolpropane copolymer, reaction products with di-Et malonate and Et acetoacetate 81217-97-2DP, 1,3-Butanediol-hexamethylene **diisocyanate** copolymer, reaction products with di-Et malonate and Et acetoacetate 81295-91-2DP, 1,3-Butanediol-hexamethylene **diisocyanate** copolymer, sru, reaction products with di-Et malonate and Et acetoacetate
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(crosslinking agent; storage-stable compns. for one-liq. thermosetting resin compns. curable at low temps.)
IT 71-36-3, 1-**Butanol**, uses
RL: NUU (Other use, unclassified); USES (Uses)
(solvent; for blocked **polyisocyanate** crosslinking compns. with improved storage stability)

L7 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1988:612475 CAPLUS
DN 109:212475
TI Compositions containing oligomeric urea-urethane resin binders for cathodic coating
IN Fink, Horst; Friedrich, Hans; Pudell, Jutta; Pronina, I. A.; Vasil'eva, O. V.; Gvozdeva, E. N.; Lapin, V. F.; Kravchenko, V. I.; Rudkovskaya, L. A.; Ruchkin, A. A.
PA VEB Farben- und Lackfabrik Leipzig, Ger. Dem. Rep.
SO Ger. (East), 4 pp.
CODEN: GEXXA8
DT Patent
LA German
IC ICM C09D005-44
ICS C25D013-04
CC 42-7 (Coatings, Inks, and Related Products)
Section cross-reference(s): 55, 56
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI DD 254583 A1 19880302 DD 1986-297566 19861215

AB The title compns. contain esters of aliph. dicarboxylic acids and C1-5 alcs. and C1-5 alc.-blocked diisocyanates as additives which improve the corrosion resistance, d., flow, and adhesion of the coatings. Thus, 680 parts oligomeric urea-urethane resin from soybean oil fatty acid Me ester-triethylenetetramine adduct (amine equiv. 180) and BuOH-blocked 2,4-toluene **diisocyanate** (free NCO content 22.9%; blocked NCO content 13.7%) was mixed with di-Et malonate 20, alc. (1:1:1 MeOH-iso-BuOH-isoamyl alc.)-blocked TDI 20, solvent (glycol) 30, and pigment/filler 250 parts, mixed with AcOH to give pH 5-6, dild. with water to 20% solids, and cathodically deposited to give a coating.

ST corrosion resistance polyurethane polyurea; polyurethane polyurea coating anticorrosive; triethylenetetramine polyurethane polyurea coating; malonate polyurethane polyurea coating; cathodic coating polyurethane polyurea; TDI blocking cathodic coating

IT Coating materials
(anticorrosive, cathodic, polyurethane-polyureas, additives for)

IT Coating materials
(cathodic, polyurea-polyurethanes, additives for)

IT 71-36-3D, **Butanol**, reaction products with TDI, polyurethane-polyureas 80-05-7D, Dian, polyurethane-polyureas 107-18-6D, Allyl alcohol, reaction products with TDI, polyurethane-polyureas 112-24-3D, Triethylenetetramine, polyurea-polyurethanes 584-84-9D, 2,4-Toluene **diisocyanate**, reaction products with alcs., polyurethane-polyureas 682-09-7D, Trimethylolpropane diallyl ether, reaction products with diisocyanates, polyurethane-polyureas 4098-71-9D, reaction products with trimethylolpropane diallyl ether, polyurethane-polyureas
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, anticorrosive, cathodic)

IT 64-17-5D, Ethanol, reaction products with TDI, polyurea-polyurethanes 67-56-1D, Methanol, reaction products with TDI, polyurea-polyurethanes 67-63-0D, Isopropanol, reaction products with TDI, polyurea-polyurethanes 71-41-0D, Amyl alcohol, reaction products with TDI, polyurea-polyurethanes 75-85-4D, tert-Amyl alcohol, reaction products with TDI, polyurea-polyurethanes 78-83-1D, Isobutanol, reaction products with TDI, polyurea-polyurethanes 123-51-3D, Isoamyl alcohol, reaction products with TDI, polyurea-polyurethanes 26471-62-5D, TDI, reaction products with alcs., polyurea-polyurethanes
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, cathodic, anticorrosive)

IT **105-53-3**, Diethyl malonate 106-65-0, Dimethyl succinate 34212-60-7
RL: USES (Uses)
(polyurethane-polyureas contg., for cathodic coatings)

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